

MULTIMODAL FREIGHT ANALYSIS STUDY



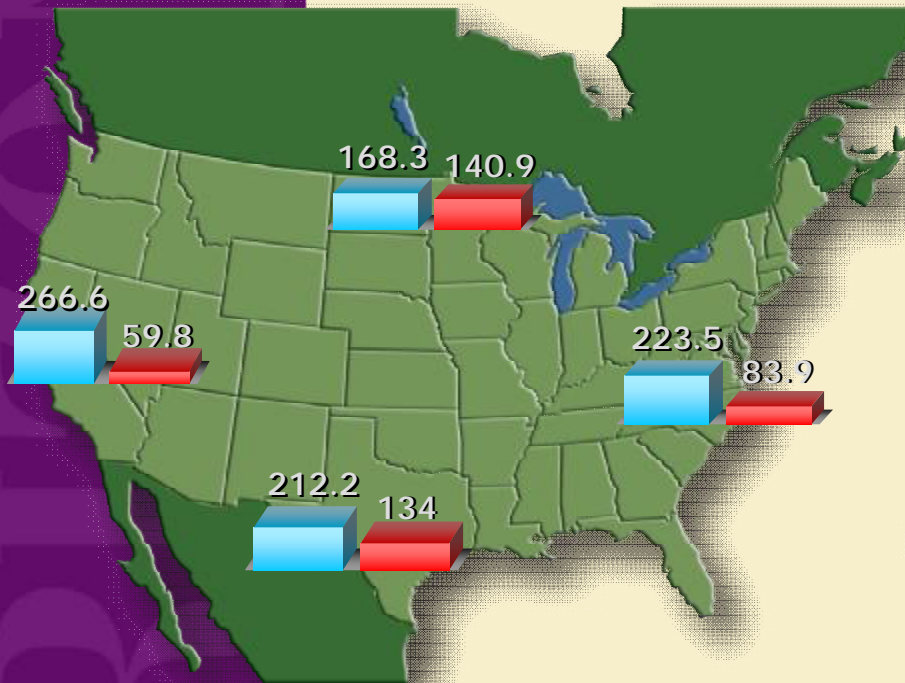
PREPARED FOR THE
ARIZONA DEPARTMENT OF TRANSPORTATION

Agenda

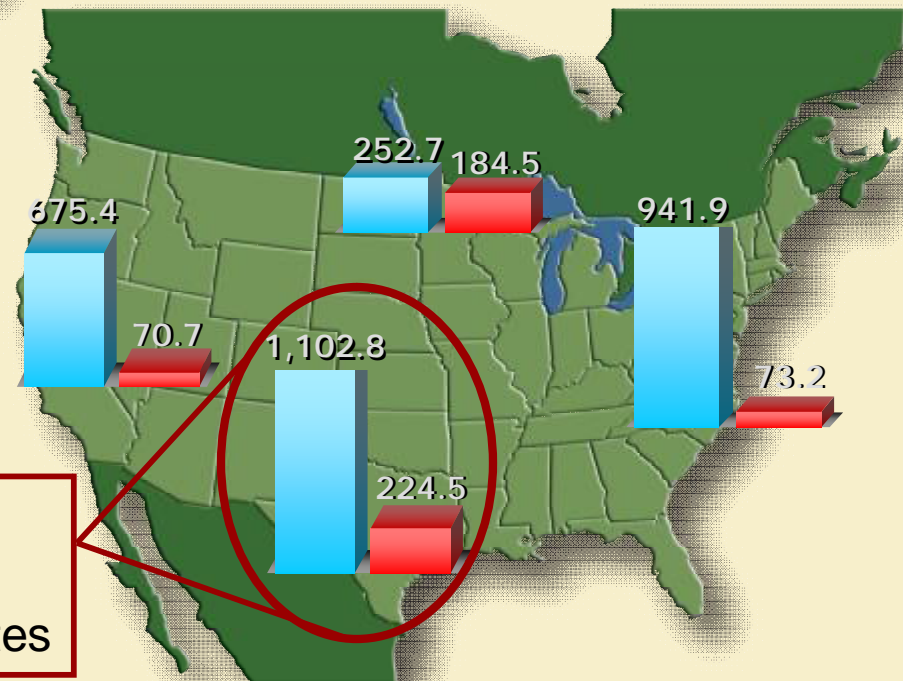
- **Overview of Project Work Plan**
- **TRANSEARCH Data Discussion**
- **Stakeholder Outreach Plan Discussion**
- **Wrap-up and Next Steps**

Why Does Freight Matter?

2003



2020



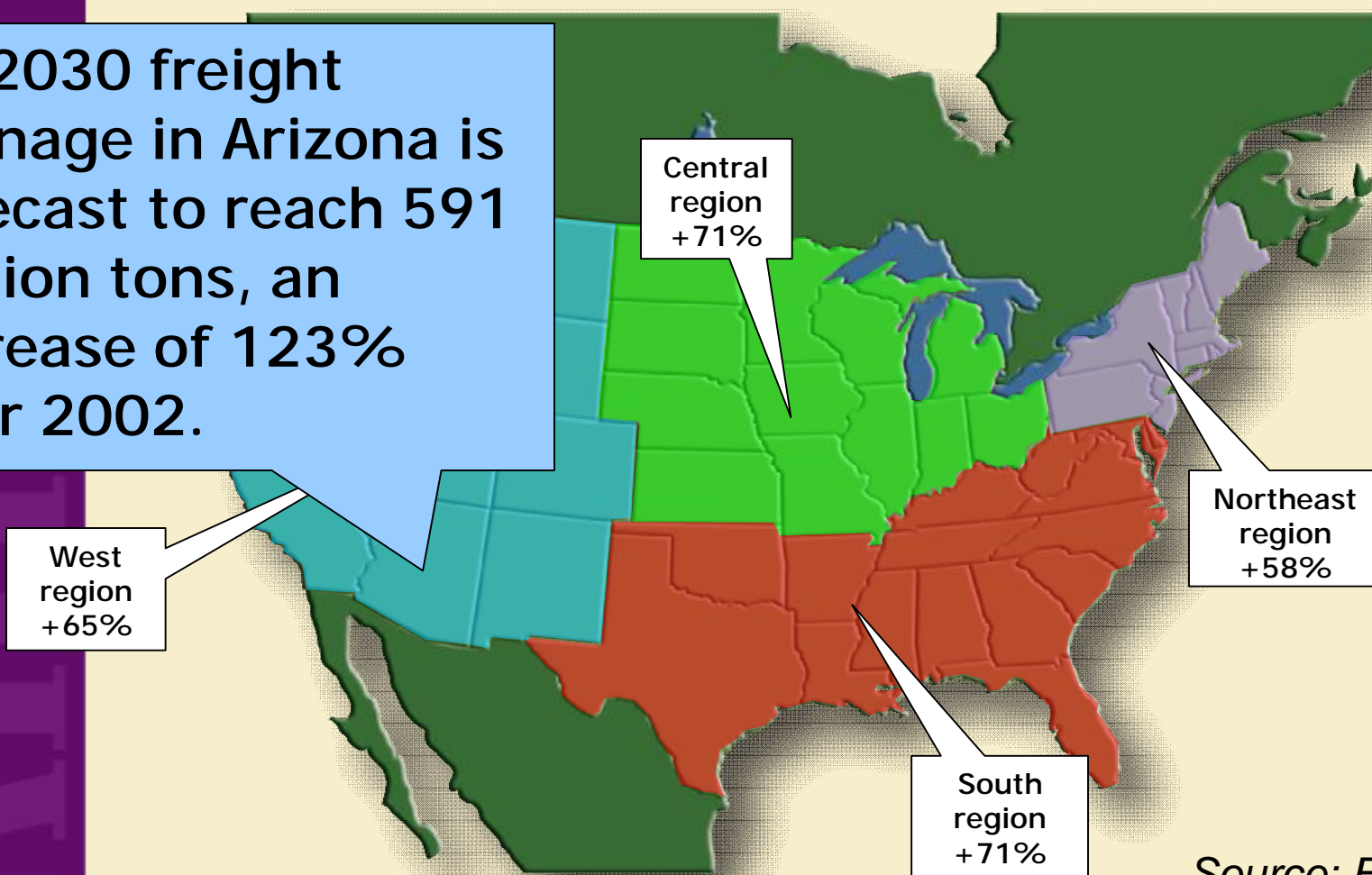
Burgeoning foreign trade will dramatically increase freight traffic in border states

Source: FHWA

MULTIMODAL FREIGHT ANALYSIS STUDY

U.S. domestic freight tonnage growth forecast, 2000-2020

By 2030 freight tonnage in Arizona is forecast to reach 591 million tons, an increase of 123% over 2002.



Source: FHWA

Scope of Work

1. Inventory & Assess Freight Transportation Industry (Demand)

Identify Key Industries

Analyze Arizona Freight Flows

Engage Private Sector Stakeholders

Identify Emerging Trends & Impacts

2. Assess Existing Infrastructure (Supply)

Public Institutional Environment

Inventory modal networks

— Highway Corridors

— Railroad Network

— Air Cargo System

3. Strategic Directions for Freight Planning

Identify Broad Themes for Future Planning

System Impacts on Key Industries

The Impact of Freight on Econ Development

Develop Freight System Performance Measures

Develop Long Range Freight Planning Framework

MULTIMODAL FREIGHT ANALYSIS STUDY

1. Assess Freight Industry – Identify Freight Dependent Industries

- **Build on previous studies/analyses**
- **Analyze TRANSEARCH and Freight Locator data**
- **Identify and map key commodity generating facilities**
- **Describe and map key industry supply chain process flows**

1. Assess Freight Industry – Analyze Freight Flows

- **Analyze TRANSEARCH commodity flow data to identify**
 - Major trading partners
 - Key modal corridor
 - Tonnage and value summaries
- **Descriptive summary highlighting major commodities and markets, using maps and graphics**

1. Assess Freight Industry – Engaging Private Stakeholders

- Identify stakeholders through CSCMP, chambers of commerce, and other sources
- Conduct interviews with a cross section of industry modal stakeholders
- Establish a Freight Advisory Committee
- Host the FHWA one-day “*Engaging the Private Sector*” workshop.

1. Assess Freight Industry – Emerging Trends and Issues

Railroad Trends and Issues

- Increasing demands on rail capacity
- Intermodal pricing
- Corridor development: Arizona-Guaymas
- Selected new investment with ramifications for Arizona
 - Union Pacific freight car classification yard: Picacho
 - Union Pacific rail line to Punta Colonet

1. Assess Freight Industry – Emerging Trends and Issues

- **Summarize trends in key industries**
- **Document issues and trends from stakeholder interviews**

The key results and analysis of each of the four subtasks will be described in a Technical Memorandum

2. Existing Freight Infrastructure Assessment - Institutional Environment

- Discuss private stakeholder issues and concerns with key public officials and private sector associations
- Conduct face-to-face interviews
 - transportation policy officials
 - economic development officials
 - regulatory enforcement officials
- Document innovative practices and programs being conducted in peer agencies

2. Freight Infrastructure Assessment - Highway Corridors

- Evaluate existing and future operating conditions
 - Interstate Highways
 - National Network Highways
 - Key Regional Corridors
 - Connections to Freight Hubs
- Describe attributes of highway network
 - traffic volumes
 - percentage of truck volume
 - levels of service
 - intersection/interchange configurations
 - key public truck facilities

2. Existing Freight Infrastructure Assessment - Rail Freight Network

- Profile rail network
 - Ownership
 - Classification – main line/branch line, freight only/freight-passenger
 - Operations
 - Configuration and physical parameters
 - Density
- Profile rail terminals and facilities: intermodal, bulk, truck-rail transload
 - Ownership
 - Configuration
 - Use
 - Highway access

2. Existing Freight Infrastructure Assessment - Rail Freight Network

- Profile markets and traffic
 - Location
 - Principal shippers
 - Principal commodities
 - Traffic flows – originated, terminated, through (overhead)
- Assess impact of future development on major rail corridors
 - Affected corridors
 - Future requirements

2. Existing Freight Infrastructure Assessment - Air Cargo System

- Review Arizona's airport facilities and identify level of cargo activity
- Inventory airport facilities
 - Airfield facilities - runways, taxiways
 - NAVAIDS
 - Terminal facilities
 - Ground transportation facilities
 - Cargo storage/handling facilities
 - Cargo carriers/aircraft used
 - Activity levels - cargo tonnage by type
 - Potential intermodal connections

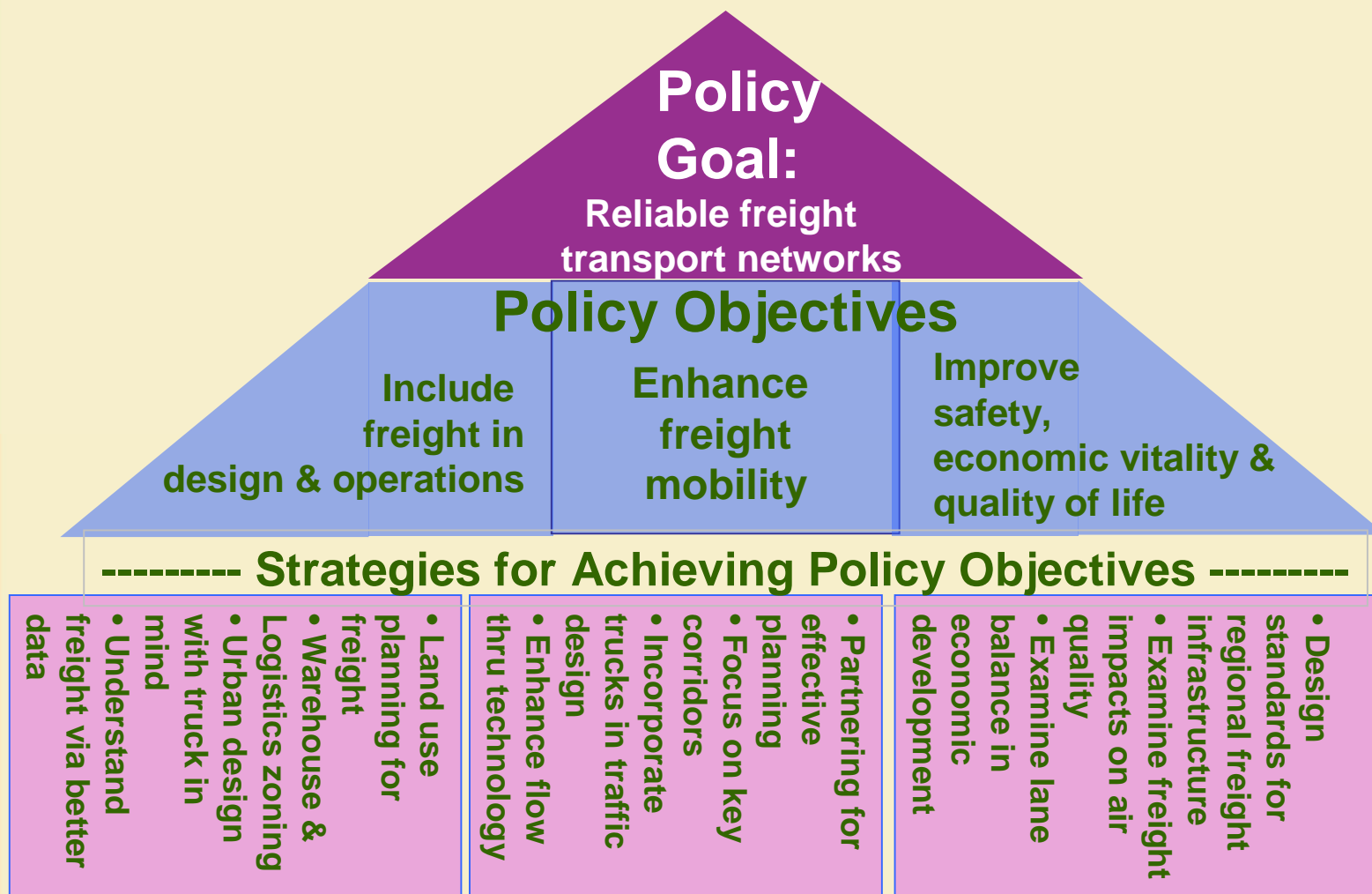
3. Strategic Directions – Broad Themes for Future Freight Planning

- Integrate with existing long range plan themes and policies
- Review latest freight planning issues/ resources from FHWA, AASHTO and TRB
- Examine strategic themes in other states.

3. Strategic Directions – Impacts of Freight on Economic Development

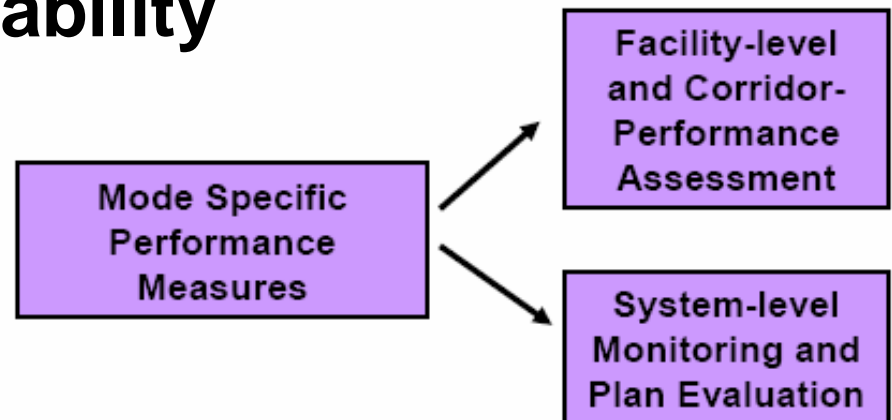
- Quantify significance of freight/logistics industries to region
- Model economic returns of improving freight transportation
- Inform policymakers and public about importance of freight

3. Strategic Directions – Establish a Freight Planning Framework



3. Strategic Directions – Develop Key Freight Performance Indicators

- Data availability
- Prediction feasibility
- Robust
- Meaningful (tied to decisions being made and goals/objectives)
- Monitoring capability



Final Report & Executive Summary

- Technical Memorandums will be produced from each of the primary tasks
- The Tech Memos will be condensed and combined with the development of recommendations into a draft final report
- Upon approval of the Final Report, an Executive Summary will be produced for broad distribution.

Questions??